July 31, 1934. W. A. SMITH 1,968,622

MOPSTICK

Filed Nov. 10, 1931

Fig. 1.

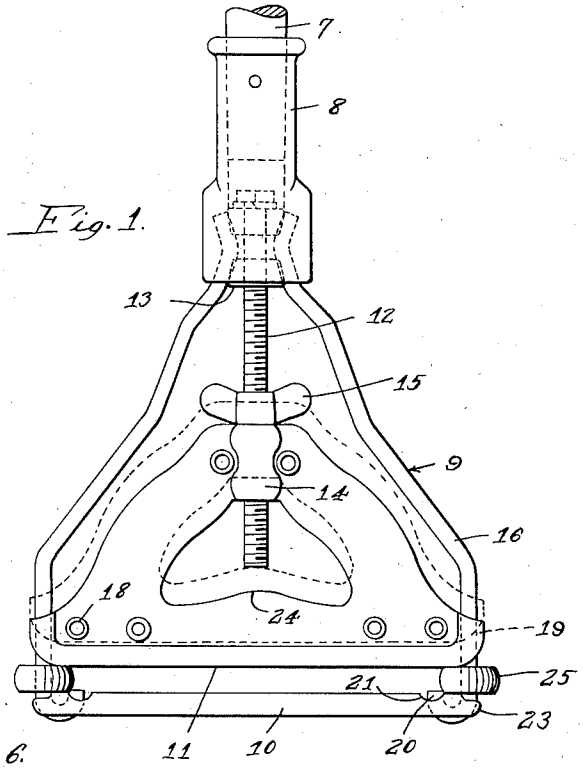


Fig. 6.

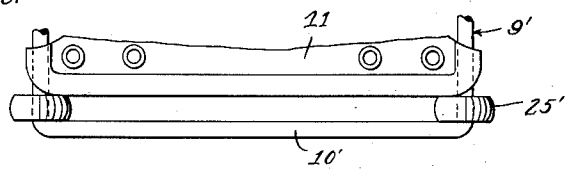


Fig. 2.

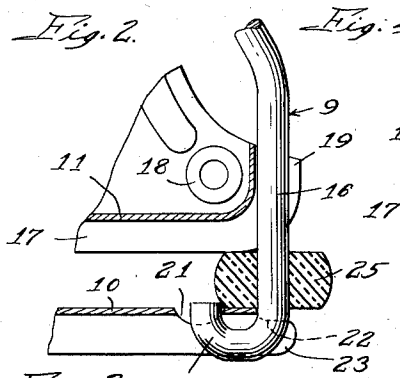


Fig. 4.

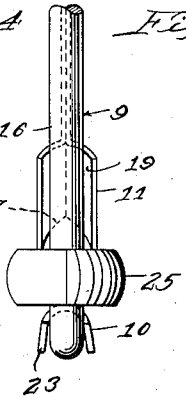


Fig. 5.

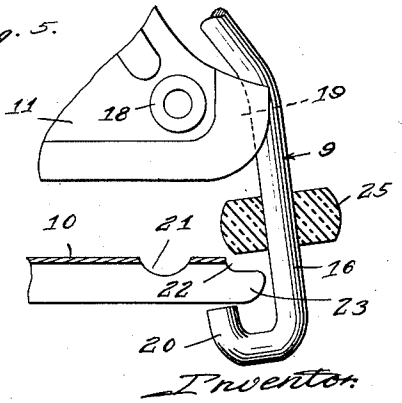
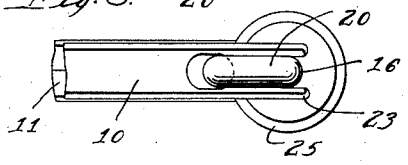


Fig. 3.



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UNITED STATES PATENT OFFICE

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MOPSTICK

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Application November 10, 1931, Serial No. 574,155

6 Claims. (Cl. 15—153)

This invention relates to an improved mopstick.

Mopsticks were, for many years, made with a one-piece bail wire. The objection to that construction has been that of the difficulty in removing the mop which was apt to become so entangled that it would have to be cut to permit removal, thus destroying the mop so far as its being of any further use is concerned. This objection created the demand for a mop having a removable cross-piece to serve as the stationary jaw. It has been quite a problem to device a mopstick of that kind of such construction that the side members will not spread apart when clamping pressure is applied to the mop. It is, therefore, the principal object of my invention to provide a mopstick in which the stationary jaw is interlocked with the side members in such a way that the more tightly the mop is clamped the more firmly the parts are held together, thus avoiding any possibility of spreading. Incidentally, the mopstick of my invention is so constructed that a positive stop is provided for the movable jaw to keep it from being backed away from the stationary jaw far enough to encounter the side members, whereby to eliminate any danger of spreading the side members.

Another object of my invention is to provide bumpers on the side members for protection of furniture and other woodwork with which the mop may come in contact.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a front view of a mopstick embodying my invention;

Fig. 2 is a section through one side of the mop head to better illustrate the construction;

Figs. 3 and 4 are, respectively, a bottom and a side view of Fig. 2;

Fig. 5 is a view indicating the method of assembly and disassembly, and

Fig. 6 is a fragmentary front view of a mop head showing the application of the bumpers in the case of a one piece bail wire.

Referring to the drawing, in which similar reference numerals are used to designate corresponding parts throughout the views, 7 designates the lower end of the handle entered in a socket 8 on which the mop head is carried. The latter, briefly stated, comprises a bail 9 providing a stationary jaw 10 for cooperation with a movable jaw 11. A bolt 12, which projects from the socket 8, serves not only as a means for anchoring the bail 9, as by means of the tapered plugs 13, but cooperates with the movable jaw so that clamping pressure may be applied to a mop entered between the jaws, the bolt passing freely through an elongated bearing 14 on the butt portion of the jaw 11 and having a wing nut 15 threading thereon behind the bearing to force the jaw outwardly. Mopsticks of this general construction are well known and no invention is claimed therein excepting as to certain novel features which will now be pointed out.

The bail 9, instead of being made from a single piece of wire with the stationary jaw as an integral part thereof is formed from two identically formed, and hence interchangeable pieces of wire 16 constituting side members to interlock with the opposite ends of a removable cross-piece forming the jaw 10. The jaw 10 is stamped from a piece of sheet metal to channel-shaped cross-section and is disposed with its rounded web portion on the inside so that when a mop is laid over the same it is firmly gripped by the movable jaw by reason of the complementary trough 17 provided in the latter. The movable jaw 11 is made from two pieces of sheet metal riveted together, as indicated at 18, the lower marginal edges of which are flanged to form the trough 17 the full length of the jaw 11, and continuations of this trough at the ends, as indicated at 19, for reception of the side members 16 whereby to guide the jaw 11 for movement toward and away from the jaw 10. Notice that the side members 16 do not rely upon the movable jaw 11 to keep the same from spreading. Spreading of the side members is prevented by reason of the interlocking of the inturned hook-shaped lower ends 20 of the side members in holes 21 provided therefor in the web of the channel-shaped jaw 10. The ends of the jaw 10 have portions of the web cut away, as indicated at 22, so as to make the ends forked whereby to provide lugs 23 for engagement with the side members 16 on the front and back thereof and thus prevent the jaw 10 from turning on its longitudinal axis and also prevent the mop from becoming entangled in the ends of the jaw. The jaw, when interlocked in this way with the side members, is not apt to become dislodged, because the tighter the mop is clamped the more firmly the jaw 10 is gripped on the hooked ends 20 of the side members. Furthermore, there is at least a slight tendency for the ends of the jaw 10 to wedge in the crotches of the hooked ends 20 of the side members in the clamping of the mop, as will be understood from observation of Fig. 2, so that the jaw 10 becomes a solid part of the mop head. On the other hand, the jaw can be removed with very little difficulty when the jaw 11 is in retracted position, by simply raising it off the hooked ends 20 of the side members 16 and then forcing the one side member outwardly enough to clear the ends of the lugs 23, as indicated in Fig. 5. The side members 16 have sufficient resilience so that when they are sprung to the small extent required for removal of the jaw 10 they spring back to normal position. While the jaw 10 may be removed so easily it is, nevertheless, not apt to become dislodged of itself

when the jaw 11 is retracted; it is tightly enough engaged with the hooked ends of the side members to stay in place until removed. However, if there were any tendency for the side members to spread there might be danger of the jaw 10 becoming dislodged and dropping out, and for that reason I provide the bolt 12 of greater length than required for the use of the wing nut 15, so that it will strike the jaw 11 at a point 24 and prevent the jaw from encountering the side members 16 and spreading the same.

Rubber spools 25 are provided on the side members 16 between the jaws 10 and 11 so as to be firmly clamped in place along with the mop. These spools serve primarily as bumpers to protect furniture and other woodwork with which the mop may come in contact, but also serve in a measure to retain the jaw 10 on the hooked ends 20 of the side members 16, as should be evident from inspection of Fig. 2, the spools being disposed for contact with the ends of the jaw alongside the holes 21.

Bumpers of the form just described are, in accordance with my invention, applicable to any mopstick regardless of whether the bail be of one piece or plural piece construction. Thus, in Fig. 6, I have shown a bail 9' made from a single piece of wire so as to provide an integral jaw 10' for cooperation with the movable jaw 11. The bumpers 25' are, in this case, likewise entered between the stationary and movable jaws at opposite sides of the mop head so as to be clamped in place along with the mop and serve by projection from the mop head to protect objects from direct contact with the mop head.

It is believed the foregoing description conveys a good understanding of the objects and advantages of my invention. The appended claims have been drawn so as to cover all legitimate modifications and adaptations.

I claim:

1. In a mopstick comprising a handle, a pair of side members projecting from the handle to form the opposite sides of a mop head, the lower ends of the side members having inturned upwardly projecting hooks formed thereon, a stationary jaw fitting between the side members over the tops of the hooks and having recesses provided thereon for reception of the ends of the hooks whereby to prevent spreading of the side members with respect to each other, another jaw movable toward the stationary jaw to clamp a mop therebetween, and resilient spools adapted to serve as bumpers fitting on the side members so as to be clamped between the jaws in the clamping of a mop and so as to project from the sides of the mop head for use as bumpers.

2. In a mopstick comprising a handle, a pair of side members projecting from the handle to form the opposite sides of a mop head, the lower ends of the side members having inturned upwardly projecting hooks formed thereon, a stationary jaw fitting between the side members over the tops of the hooks and having recesses provided thereon for reception of the ends of the hooks whereby to prevent spreading of the side members with respect to each other, another jaw movable toward the stationary jaw to clamp a mop therebetween, and resilient spools adapted to serve as bumpers fitting on the side members so as to be clamped between the jaws in the clamping of a mop and so as to project from the sides of the mop head for use as bumpers, the said spools being further disposed so as to retain the stationary jaw on the hooked ends of the side members under the pressure thereon of the movable jaw.

3. In a mopstick comprising a handle, a pair of side members projecting from the handle to form the opposite sides of a mop head, the ends of said side members having upwardly projecting hooks thereon, a stationary jaw extending between the ends of the side members and having holes provided therein at its opposite ends for removably interlocking the ends of the jaw with the hooked ends of the side members, a movable jaw guided on the side members for movement toward and away from the stationary jaw, means for operating the movable jaw, and a pair of bumpers mounted on the side members so as to be clamped between the jaws, said bumpers projecting from the sides of the mop head to protect objects from direct contact with the mop head, said bumpers further serving to retain the stationary jaw on the hooked ends of the side members.

4. In a mopstick comprising a handle, a bail thereon comprising a pair of side members projecting from the handle and having the outer ends thereof formed to receive a stationary jaw, and a stationary jaw fitting on the ends of said side members, another jaw movable relative to the side members of the bail toward the stationary jaw to clamp a mop therebetween, and a pair of bumper spools of resilient material slidably engaged on the ends of the side members before the assembling of the stationary jaw thereon and disposed so as to be clamped between the stationary jaw and the movable jaw, said bumper spools projecting from the sides of the mop head for protection of objects against direct contact with the mop head.

5. In a mopstick comprising a handle, a pair of side members projecting from the handle to form the opposite sides of a mop head, a stationary jaw extending crosswise between the ends of the side members and removably interengaged therewith to hold the side members against spreading with respect to one another, a movable jaw guided on the side members for movement toward and away from the stationary jaw, and means for operating the movable jaw, said means comprising a threaded shank rigid with the handle and projecting downwardly between the side members, the movable jaw having a butt portion freely receiving said shank, and a nut threading on said shank against the butt portion, said shank being elongated sufficiently to serve as a stop for engagement by a portion of the movable jaw in front of the butt portion, whereby to prevent retracting of the movable jaw beyond a predetermined point for the purpose described.

6. In a mopstick comprising a handle, a bail projecting therefrom, comprising side portions, and a cross-portion adapted to serve as a stationary mop holding jaw, another jaw movable relative to the side portions of the bail toward the stationary jaw to clamp a mop therebetween, and a pair of bumper spools of resilient material each having a center hole provided therein for reception of a side portion of the bail, whereby the spool is disposed between the jaws with one side thereof arranged to be clamped in the closing of the jaws and with the opposite side projecting from the side portion of the bail for engagement with adjacent objects to protect the same against direct contact with the bail.

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